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动物分类学报

异草盲蝽属一新种及陕西昧盲蝽雌性的描述 (半翅目，盲蝽科)

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摘 要 记述了盲蝽科盲蝽亚科异草盲蝽属 *Heterolygus* Zheng et Yu 1 新种，郑氏异草盲蝽 *Heterolygus zhengi* sp. nov.，模式标本采于我国四川省炉霍。发现了盲蝽科合垫盲蝽亚科昧盲蝽属 *Mecomma* Fieber 陕西昧盲蝽 *Mecomma shaanxiensis* Liu et Yamamoto 的短翅型雌性，并进行了描述。标本均保存于内蒙古师范大学生命科学与技术学院昆虫标本馆。
关键词 盲蝽科，盲蝽亚科，合垫盲蝽亚科，异草盲蝽属，昧盲蝽属，新种.
中图分类号 Q969.357.6

异草盲蝽属 *Heterolygus* Zheng et Yu, 1990 是盲蝽亚科中的 1 个小属，自建立以来共记载了 10 种，全部分布于我国。在整理采自我国四川省西部甘孜藏族自治州炉霍县的一批盲蝽科昆虫标本时，发现该属 1 新种，描述如下。测量单位 mm。

黑异草盲蝽，新种 *Heterolygus zhengi* sp. nov. (图 1～10)

体长椭圆形，较平坦，黑褐至黑色，具平伏的褐色弯曲丝状毛被和均匀刻点。

雄虫头部黑色，有时小颊黑褐色，唇基顶端狭窄的棕黄色；额区两侧斜行横纹微呈棱状，由于平伏的浅褐色丝状毛随横纹走向而更加明显；小颊、唇基、额区和头顶中央及后缘毛前指，头顶两侧在复眼内侧各具 1 无毛的光滑区域；复眼表面颗粒状，栗色，下半部内侧及周缘棕色，常带红褐色。雌虫头部褐色至黑色，如为褐色则在额区及头顶联合形成“X”形黑色斑纹，唇基中央有时也呈黑色。雄虫触角黑褐，具浅褐色短毛，第 I、II节较第 III、IV节粗，第 II节基部较细，向端部渐变粗；雌虫触角棕色至黑褐，第 II节基部 1/3 以上渐变成黑褐色。喙深褐色，顶端伸达后足基节间。

前胸背板黑褐至黑色，后侧角及后缘呈狭窄的淡色边缘；领前缘色稍淡，领上浅褐色弯曲毛近直立，指向前中方向；前胸背板半直立毛较密而长，盘域毛较稀疏；小盾片黑褐至黑色，基半部具横皱，亚端部略凹，端部凸起呈光亮小瘤状。雌虫前胸背板有时呈深褐色，但胝区黑色；小盾片深褐色，中央呈 1 个三角形黑褐色大斑。

前翅色黑褐，具平伏浅褐色弯曲短毛被，由于毛的指向不同而呈现不规则的亮毛斑；膜片棕灰色，翅脉基部黑褐，在近楔片端角处和膜片外缘中部具 2 个浅色半透明斑。褐色至黑褐色。

足腿节黑褐色，具半直立浅褐色毛，后缘毛长约等于腿节粗；胫节基部 2/5 和端部 1/5 深褐色，中部 2/5 浅棕色，具半直立浅褐色短毛；跗节深褐色，第 III节大部黑褐。

胸部腹面黑褐至黑色，臭腺孔缘黄白色；腹部腹面深褐色，具平伏浅褐色短毛。

雄性右阳基侧突体部具少数小齿和毛，顶端指状斜指 (图 1～3)；左阳基侧突镰形，感觉叶块状，具小齿，体部具毛，端突铲状 (图 4～5)；阳茎端呈佛手状，由 3 枚长指形膜囊和基部多个瘤状膜囊构成，骨化弱，几透明，无骨化的针突 (图 6～7)；阳茎鞘粗壮 (图 8)。

体长 5.85～6.15；宽 2.25～2.85。头长 0.45～0.60，宽 1.05，头顶宽 0.45，触角第 I节长 0.60，第 II节长 1.43～1.58，第 III节长 0.72～0.78，第 IV节长 0.72～0.75。前胸背板长 0.90～0.98，宽 1.95～2.10，领长 0.09～0.11，小盾片长 0.90，宽 1.05。前翅革片长 2.32～2.40，爪片长 1.88～2.03，楔片长 0.90～0.98，膜片长 0.98～1.05。

正模 ♂，四川甘孜藏族自治州炉霍县 (海拔 3 500 m)，2006-08-16，石福明采。副模 25 ♂♂，38 ♀♀，同正模。存于内蒙古师范大学生命科学与技术学院昆虫标本馆。

分布：四川 (炉霍)。

词源：新种学名依据我国著名直翅目分类专家郑哲民教授姓氏而命名，以纪念其在昆虫分类学中的卓越贡献。

新种外形特征与棒角异草盲蝽 *H. clavicornia*

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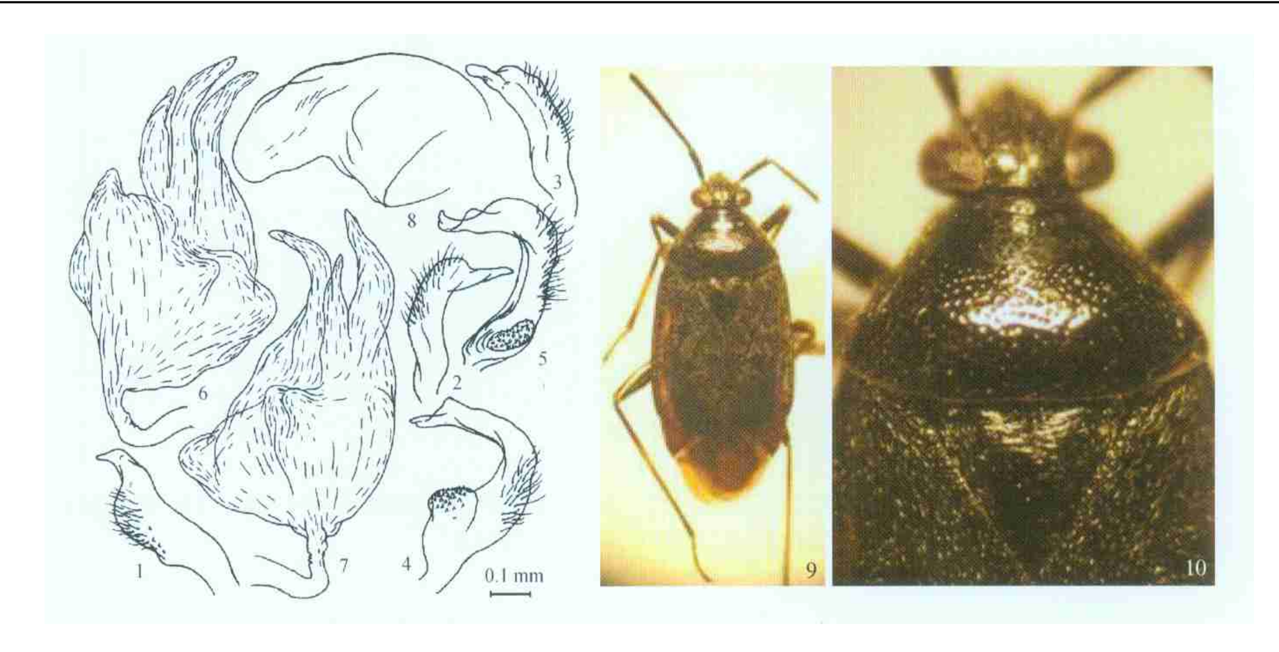


图 1～10 郑氏异草盲蝽，新种 *Heterolygus zhengi* sp. nov.（♂）
1～3. 雄性右阳基侧突（right paramere, different views） 4～5. 雄性左阳基侧突（left paramere, different views） 6～7. 阳茎端（vesica, different views） 8. 阳茎鞘（phallotheca） 9. 外形图 10. 前胸背板及小盾片

(Reuter, 1906) 和褐黑异草盲蝽 *H. fusconiger* Zheng et Yu, 1990 相似，但新种阳茎端呈佛手状，由 3 枚长指状膜质囊和多个小瘤突状膜囊构成，骨化很弱，几乎透明，无骨化针突等特征可相互区分，并可与本属的其它种类区别。

昧盲蝽属 *Mecomma* Fieber, 1858 是合垫盲蝽亚科一个较小的属，目前世界共记述 40 种，中国分部的种类有 10 种。2004 年刘国卿等以采自陕西省宁陕县的雄性标本为正模描述了陕西昧盲蝽 *Mecomma shaanxiensis* Liu et Yamamoto, 2004，而且所有的副模标本都为雄性，雌性特征未知。在整理采自陕西秦岭山区的一批半翅目昆虫标本时，发现该属一短翅型种类，经鉴定为陕西昧盲蝽 *M. shaanxiensis* 的短翅型雌性，证明该种具有雌雄二型现象，在此予以描述，作为对该种原始描述的补充。测量单位 mm。

陕西昧盲蝽 *Mecomma shaanxiensis* Liu et Yamamoto, 2004（图 11）

Mecomma shaanxiensis Liu et Yamamoto, 2004. *Oriental Insecta*, 38: 231-232, figs. 56-62.

雌虫（图 11）特征描述。短翅型，前翅长 1.25，体长 3.45～3.60，宽 1.50～1.73。头长（背面观）0.45，宽 1.05。前胸背板长 0.60，宽 0.89～1.05。小盾片长 0.36，宽 0.68。身体长卵圆形，黑色，略具光泽，具半直立浅棕色毛和不规则粗浅刻点。

头黑色，具直立和半直立浅棕色细毛，额区下方两侧毛前指，头顶在复眼内侧各具 1 小棕褐色斑；

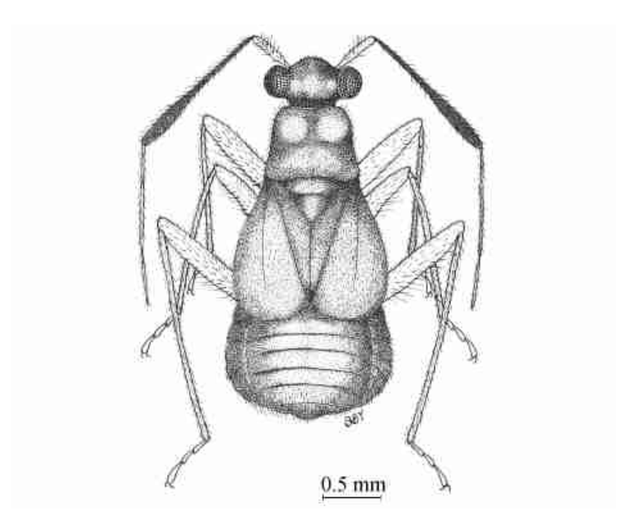


图 11 陕西昧盲蝽 *Mecomma shaanxiensis* Liu et Yamamoto, 2004（♀）

复眼表面颗粒状，棕灰色，具不规则黑色斑和极短毛；触角第Ⅰ节棕色，短于或约等于头顶宽度，具平伏短毛和少数近直立长毛，第Ⅱ节黑，长棒状，具半直立褐色毛，第Ⅲ节基部 1/2 棕色，端部 1/2 和第Ⅳ节黑褐，具半直立浅色短毛；喙棕色，略带橙红色，第Ⅳ节大部黑色，顶端伸达后足基节间。

前胸背板钟形，具平伏和半直立暗褐色毛，胝区大而鼓，两胝间低，呈纵凹状，盘域具粗横皱，前侧角具少数直立长毛；小盾片平坦，具平伏暗褐色短毛和细横皱，中部略横凹。

前翅鞘翅状，被平伏短毛和半直立褐色长毛，隐约可见爪片侧缘；翅外缘半圆形，较厚实，具褐色毛，仅伸达可见第Ⅱ腹节背板的后缘。

足棕色,腿节具平伏褐色毛,近端部毛半直立,稍长,胫节具浅色短毛和半直立浅色胫刺,跗节第Ⅲ节端半及爪暗褐色。

腹部较宽,腹面黑色且光泽较强。

观察标本:3 ♂♂, 4 ♀♀,陕西省宁陕县旬阳坝(3 000 m),2001-08-27,齐宝瑛采。存于内蒙古师范大学生命科学与技术学院昆虫标本馆。

分布:陕西(宁陕)。

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A NEW SPECIES OF THE GENUS HETEROLYGUS AND DESCRIPTION OF THE FEMALE OF MECOMMA SHAAXIENSIS (HETEROPTERA, MIRIDAE)

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Abstract A new species of the genus *Heterolygus* Zheng et Yu, 1990 is described from Luhu County, Sichuan Province. Brachypterous female of *Mecomma shaanxiensis* Liu et Yamamoto, 2004 is found and described. All the type specimens and the observed materials are deposited in the collection of College of Life Sciences & Technology, Inner Mongolia Normal University. Measurements are given in millimeters.

***Heterolygus zhengi* sp. nov.** (Figs. 1-10)

Body elongate, plane, dark brown to black, and with adpressed brown curly pubescences and uniform punctations.

Male head black, sometime bucculae dark brown, clypeus narrowly yellowish brown distally. Obliquely transverse striations on front slightly carina-like, which more obvious because exist of adpreesed light brown hairs. Hairs on the bucculae, clypeus, front, middle and posterior margin of vertex pointed forward. There is a hairless and smooth area each near compound eyes. Surface of the Compound eyes granulated, chestnut with inner lower and around part brown, and usually with reddish brown color. Female head brown to black, forming black "X" patterns on front and vertex if brown, sometime middle of clypeus black. Male antennae blackish brown, with light brown hairs, 1st and 2nd antennal segments thicker than 3rd and 4th ones, base of 2nd segment slender, and then becoming thicker distally. Female antennae brown to blackish brown, distal 2/3 of 2nd segment blackish brown. Rostrum dark brown, with its apex reach between hind coxa.

Pronotum blackish brown to black, with posterior-lateral angle and posterior margin narrowly light colored. Anterior margin of collar slight light colored, with almost erect light brown curly hairs which pointed to middle forward. Suberect hairs on pronotum denser and longer, but sparser on discus. Scutellum blackish brown to black, basal half with transverse rugae, subapical part slight concave, dorsal of apex convex like a bright small tuber. Female pronotum sometime dark brown, but calli black. Scutellum dark brown, and with a large triangular blackish brown pattern on the middle.

Hemelytra uniformly blackish brown, with adpressed light brown curly pubescence which form irregular bright hair spots. Membrane brownish grey and base of veins blackish brown, with 2 light colored and semitransparent spots near to apex of cuneus and on middle near to outer margin. Female hemelytra sometime brown to blackish brown.

Hind femora blackish brown, with suberect light brown hairs which on their posterior margin almost as long as width of the femur. Basal 2/5 and apical 1/5 of tibia dark brown, middle 2/5 light brown, with suberect light brown short hairs. Tarsus dark brown, with majority part of 3rd segment blackish brown.

Venter of thorax blackish brown to black, ostiola peritreme yellowish white. Venter of abdomen dark brown and with adpressed light brown short hairs.

Body of right paramere slightly spinculate near base and haired laterally, with hypophysis obliquely pointed (Figs. 1-3). Left paramere sickle-like, sensory lobe spinculate, body haired, and hypophysis scoop-like (Figs. 4-5). Vesica hand-like, with three longer finger-like membrane lobes and several small nubble-like ones, almost transparent and without any spicule and sclerite (Figs. 6-7). Phallotheca robust (Fig. 8).

Body length 5.85-6.15, width 2.25-2.85. Head length 0.45-0.60, width 1.05, vertex width 0.45, length of antennal segment Ⅰ 0.60, length of antennal segment Ⅱ 1.43-1.58, length of antennal segment Ⅲ 0.72-0.78, length of antennal segment Ⅳ 0.72-0.75.

Pronotum length 0.90-0.98, width 1.95-2.10, collar length 0.09-0.11, scutellum length 0.90, width 1.05. Hemelytron length: corium 2.32-2.40, clavus 1.88-2.03, cuneus 0.90-0.98, membrane 0.98-1.05.

Holotype ♂, Luhuo County (3 500 m), Sichuan Province, 16 Aug. 2006, SHI Fu-Ming leg. Paratypes: 25 ♂♂, 38 ♀♀, same date as holotype. All deposited in the collection of College of Life Sciences & Technology, Inner Mongolia Normal University.

Distribution. Sichuan Province, China.

Etymology. The new species is named after surname of Professor ZHENG Zhe-Min.

This new species is similar to *H. clavicornia* (Reuter, 1906) and *H. fusconiger* Zheng et Yu, 1990, but differs in the hand-like vesica consisting of three longer finger-like membrane lobes and several small nubble-like ones, and without any spicule and sclerite.

Mecomma shaanxiensis Liu et Yamamoto, **2004** (Fig. 11)

Brachypterous. Body elongate ovate, black, slight glossy, with suberect light brown hairs and irregular shallow and rough punctations.

Head black, almost vertical, with erect and suberect light brown fine hairs which on lower front pointed forward. There is a small brown spot each near compound eye on vertex. Surface of the compound eyes granulate, brownish grey, with irregular black color spots and very short hairs. 1st antennal segment brown, shorter than or as long as width of the vertex, with adpressed short hairs and several erect longer hairs length of which about equal to that of width of this segment. 2nd antennal segment black, long claviform, slightly longer than the length of head and pronotum together, with suberect brown hairs. Basal half of 3rd antennal segment brown and apical half and whole 4th segment black, with suberect light colored short hairs. Rostrum brown, slightly with orange red color, majority part of 4th segment black with apex reach between hind coax.

Pronotum bell-form, with adpressed and suberect dark colored hairs, lateral margin inner curved and posterior margin concaved forward. Calli large and raised but lower between calli forming a longitudinal groove. Discus with rough transverse rugae. Anterior-lateral angle with several erect long hairs. Scutellum plane, with adpressed dark brown short hairs and fine transverse rugae, middle slight transversely concave.

Hemelytra elytron-like, covered with adpressed short hairs and suberect longer brown hairs. Lateral margin of clavus indistinctly visible. Outer margin of hemelytron semicircle, thicker, with brown hairs, apex reaches only to posterior margin of 3rd visible abdomen segment.

Leg brown. Femur with adpressed brown hairs which suberect and longer on apex. Tibia with light colored short hairs and suberects light colored tibial spines. Apex of 3rd tarsal segment and whole pretarsus dark brown.

Abdominal region wider. Visible 4th abdominal segment and that after it exposed. Middle of urotergite convex, joint part with connexivum concave, with adpressed light colored short hairs which are longer and denser on last abdominal segments and the connexivum. Venter of abdomen black and brilliant.

Body length 3.45-3.60, width 1.50-1.73. Head length (dorsal view) 0.45, width 1.05, vertex 0.45-0.48, length of antennal segment Ⅰ 0.45, length of antennal segment Ⅱ 1.43-1.50, length of antennal segment Ⅲ 1.13, length of antennal segment Ⅳ 0.45. Pronotum length 0.60, width 0.89-1.05, scutellum length 0.36, width 0.68, calli length 0.30. Hemelytron length 1.25. Length of exposed part of abdomen 0.90-0.98.

Observed materials. 3 ♂♂, 4 ♀♀, Xunyangba (3 000 m), Shaaxi Province, 27 Aug. 2001, QI Bao-Ying leg. All deposited in the collection of College of Life Sciences & Technology, Inner Mongolia Normal University.

Distribution. Shaaxi Province, China.

Key words Miridae, Mirinae, Orthotylinae, *Heterolygus*, *Mecomma*, new species.